



## CH Series Check Valves

Tylok Check Valves are poppet style valves made of 316 Stainless Steel. Their compact designs are perfect for instrumentation systems. These directional valves are normally closed, but open when the differential pressure between the inlet and outlet exceed the spring pressures.

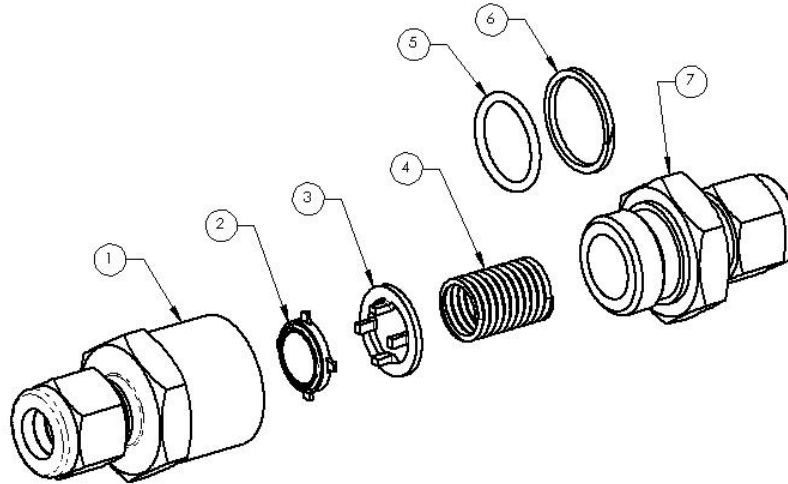
### Features:

- 6000 psi maximum pressure rating
- -10 °F to 400 °F temperature rating
- 1/3 to 10 psi cracking pressures
- Fluorocarbon FKM Seals
- End connections
  - Integral tube fitting (both twin [CBC-Lok®] & single [CS-Lok®] ferrule designs)
  - Female NPT
  - Male NPT
- Available in sizes in 1/4", 3/8", 1/2", 3/4", and 1"



## Materials of Construction

NO.	DESCRIPTION	MATERIAL / ASTM SPEC.
1	INLET BODY	316SS / A479
2	BONDED POPPET	FLUOROCARBON FKM-BONDED 316SS / A479
3	POPPET STOP	316SS / A479
4	SPRING	302SS / A313
5	O-RING	FLUOROCARBON FKM
6	BACKUP RING	PTFE / D1710
7	OUTLET BODY	316SS / A479



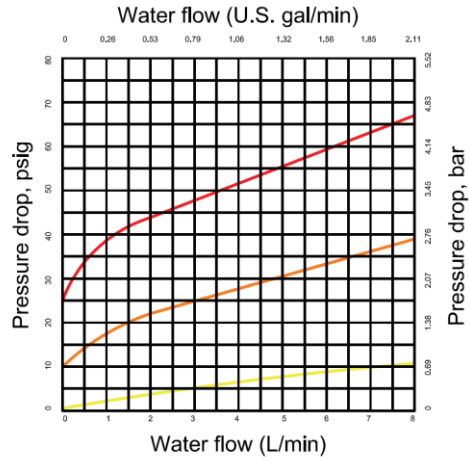
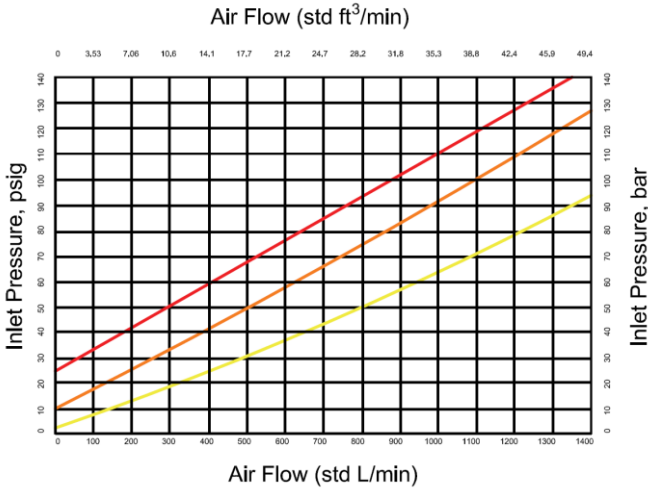
### Pressure-Temperature Ratings (based on fluorocarbon FKM seals)

Temperature, °F (°C)	Working Pressure, psig (bar)
-10 (-23) to 100 (37)	6000 (413)
200 (93)	5160 (355)
250 (121)	4910 (338)
300 (149)	4660 (321)
400 (204)	4280 (295)

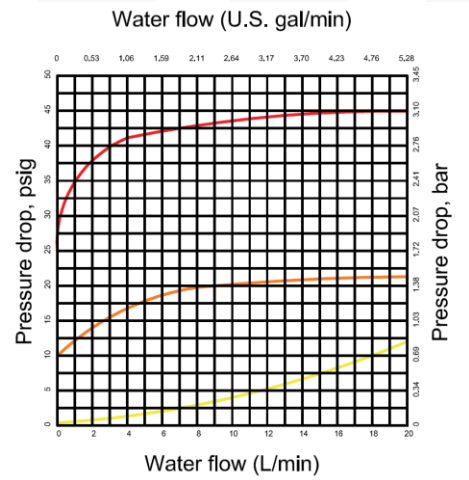
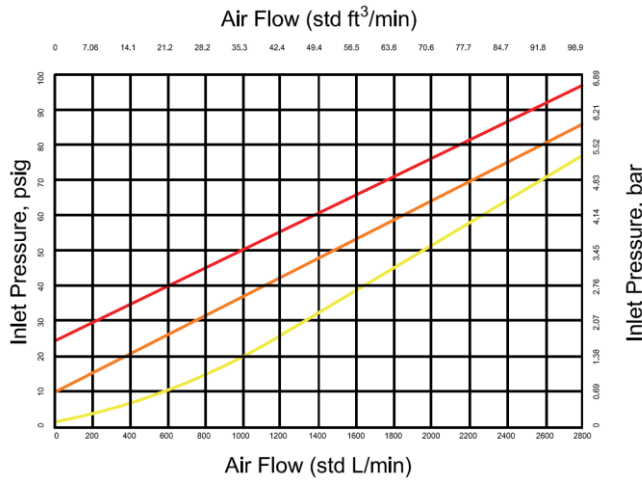
### Cracking and Reseal Pressures

Nominal Cracking Pressure psig (bar)	Cracking Pressure Range psig (bar)	Reseal Pressure Range psig (bar)
1/3 (0.02)	1/3 to 3 (0.02 to 0.21)	Up to 6 (0.41) downstream pressure
1 (0.07)	1 to 4 (0.07 to 0.28)	Up to 5 (0.34) downstream pressure
10 (0.69)	7 to 15 (0.48 to 1.0)	3 (0.21) or more upstream pressure

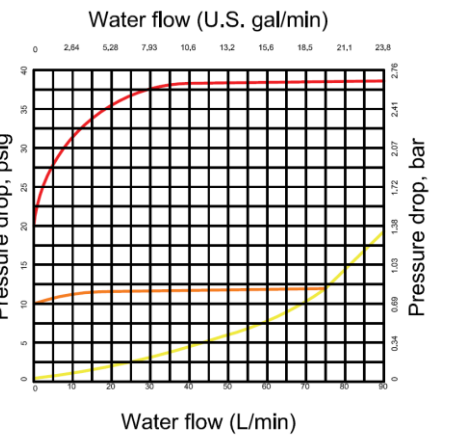
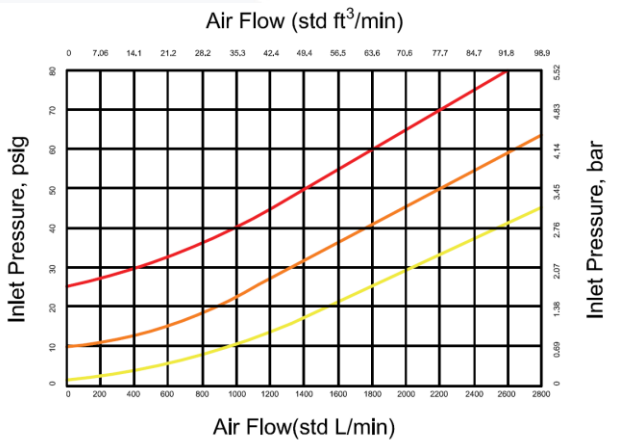
# Flow Data



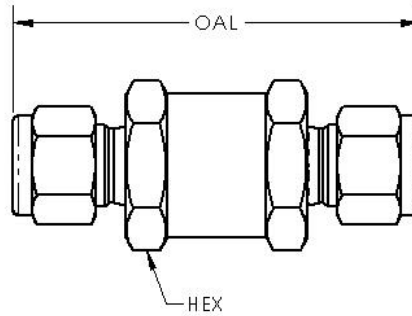
- Cv = 0.67  
Cracking Pressure = 1 psig
- Cv = 0.67  
Cracking Pressure = 10 psig
- Cv = 0.67  
Cracking Pressure = 25 psig



- Cv = 1.8  
Cracking Pressure = 1 psig
- Cv = 1.8  
Cracking Pressure = 10 psig
- Cv = 1.8  
Cracking Pressure = 25 psig



- Cv = 4.7  
Cracking Pressure = 1 psig
- Cv = 4.7  
Cracking Pressure = 10 psig
- Cv = 4.7  
Cracking Pressure = 25 psig



End Connection		Ordering Number	Pressure Rating at 100 °F (37 °C) psig (bar)	C <sub>v</sub>	OAL	Hex
Type	Size					
CBC-Lok® Tube Fitting	1/8	SS-CH-D2D2-	6000 (414)	0.67	2.27	11/16
	1/4	SS-CH-D4D4-			2.43	
	3/8	SS-CH-D6D6-	5000 (344)	1.80	2.75	1
	1/2	SS-CH-D8D8-			2.96	
	3/4	SS-CH-D12D12-	4700 (323)	4.70	3.52	1-5/8
	1	SS-CH-D16D16-	4700 (323)		3.88	
CS-Lok® Tube Fitting	1/8	SS-CH-S2S2-	6000 (414)	0.67	2.27	11/16
	1/4	SS-CH-S4S4-			2.43	
	3/8	SS-CH-S6S6-	5000 (344)	1.80	2.75	1
	1/2	SS-CH-S8S8-			2.96	
	3/4	SS-CH-S12S12-	4700 (323)	4.70	3.52	1-5/8
	1	SS-CH-S16S16-	4700 (323)		3.88	
Female NPT to Female NPT	1/4	SS-CH-F4F4-	6000 (414)	0.67	2.13	11/16
	3/8	SS-CH-F6F6-	5000 (344)		1.80	
	1/2	SS-CH-F8F8-	4600 (316)	4.70		3.03
	3/4	SS-CH-F12F12-	4300 (296)		4.70	3.23
	1	SS-CH-F16F16-	4100 (282)	3.83		
Male NPT to Male NPT	1/4	SS-CH-M4M4-	6000 (414)	0.67	2.17	11/16
	3/8	SS-CH-M6M6-			1.80	
	1/2	SS-CH-M8M8-	5000 (344)	4.70		2.73
	3/4	SS-CH-M12M12-			4.70	3.29
	1	SS-CH-M16M16-	3.67			

Note: All dimensions subject to change; to be used for reference only.

To order, add the cracking pressure to the P/N. Available cracking pressures (in psi) are 1/3, 1, and 10.

Example: SS-CH-D6D6-1/3

**NOTICE:** In designing a system incorporating tube fittings and valves, it is the designer's or user's obligation and responsibility to determine the appropriate fittings and valves to be used for each application and to insure proper installation and maintenance.

**Limited Warranty:** Tylok fittings and valves are warranted against defects in material and workmanship for the life of the product. The Warranty above set forth is the only warrant applicable to Tylok products, and is in lieu of any and all other warranties either express or implied, including any warranty of merchantability or fitness. Tylok's sole responsibility or liability as a result of any loss or damage due to a failure shall be to replace the failed part or fitting and valve, and it shall bear no liability for any incidental or consequential damages to person or property.